

between the lever arm (29) and the opposite end mounting and reaction point (7). By so doing, this allows the ramp to move between a horizontal position parallel with the truck bed (5) and a diagonal position between the truck bed and the ground, thus providing a smooth incline between the ground and the truck bed. As the load moves upward on the ramp assembly, the ramp moves from an inclined position to a horizontal position again parallel with the truck bed. The damper (30) and lever arm / pivot assembly (27 & 28) cause the ramp to move through the arc in a smooth controlled manner consistent with upward moving load. Once the load has moved fully upward on the ramp assembly (20 & 17), the load would now be in a horizontal attitude in and parallel with the truck bed (5). The inner ramp (20) can be lifted by hand and returned to the retracted stowed position inside the outer ramp (17). Utilization of the ramp to unload the truck is the reverse of the above process.

## **CLAIMS**

1. A loading device for a pickup truck having a bed with tailgate mounting brackets, the loading device comprising of:
  - a ramp support frame connecting to the tailgate support brackets;
  - a adaptor plate and arm connecting the pickup tailgate closing studs to the ramp support frame;
  - a two section pivoting telescoping ramp assembly with mounting lugs which attach to the ramp support frame, ramp assembly when extended to provide an inclined surface to the truck bed;
  - a arm connecting ramp assembly mounting lugs to a pneumatic or hydraulic damper to modulate the rate of pivot of the ramp;

a damper to modulate the rate of pivot.

2. A loading device of claim 1 wherein the ramp support frame uses the tailgate mounting brackets for attachment.
3. A loading device of claim 2 wherein the loading ramp consists of two telescoping sections pivotally coupled to the ramp support frame.
4. A loading device of claim 3 wherein the loading ramp may be secured in the closed position
5. A loading device of claim 4 wherein the loading ramp may be easily removed from the ramp support frame.
6. A loading device of claim 5 wherein the loading ramp pivotal movement is controlled by the use of damping device.
7. A loading device of claim 6 wherein the entire device may be installed or removed by one person without the use of tools.
8. A loading device of claim 7 wherein the ramp raises and lowers about a central pivot point located on the ramp support frame.
9. A loading device of claim 8 wherein the loading ramp and support frame extends the bed of the truck, thus allowing for additional cargo space.
10. A loading device of claim 9 wherein the loading ramp, support frame and mounting components may be dimensionally adjusted to be utilized with various trucks and related vehicles.

### **ABSTRACT**

A loading ramp and replacement tailgate mechanism provided for installation and use in pickup trucks and like vehicles. The assembly would replace the existing tailgate and use the same hardware as the tailgate. The ramp consists of two telescoping sections.